REMARKS

The specification has been amended to remove an inadvertent reference made to Figures 4A and 4B, which are not included with the application.

Claim Rejections - 35 USC § 112

Claims 7-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner states that in claims 7 and 8 there is a lack of antecedent basis for "the coefficient of variation". While the claims are believed definite as originally filed, as having a coefficient of variation of particle size is an inherent property of a distribution of particles, the claims have been recast in alternative (although substantively equivalent) language to advance prosecution. Reconsideration of this rejection is accordingly respectfully requested.

Claim Rejections - 35 USC § 103

Claims 1-16 are rejected under 3 U.S.C. 103(a) as being unpatentable over Smith in view of Lee et al. The Examiner states Smith discloses a process for the patterning of a desired substance on a surface; a particle formation vessel is charged, the temperature and pressure in which are controlled, with a compressed fluid; there is introduced into the particle formation vessel at least a first feed stream comprising at least a solvent and the desired substance dissolved therein through a first feed stream introduction port and a second feed stream comprising the compressed fluid through a second feed stream introduction port (fig 4); the feed stream is dispersed in the compressed fluid, allowing extraction of the solvent into the compressed fluid and precipitation of particles of the desired substance (fig 6); there is exhausted the compressed fluid, solvent and the desired substance from the particle formation vessel at a rate substantially equal to a rate of addition of such components to the while maintaining temperature and pressure in the vessel at a desired constant level, such that formation of particulate material in the vessel occurs under essentially steady-state conditions (col 8, lines 46-67); the compressed fluid, solvent and the desired substance are exhausted through a restrictive passage to a lower pressure

whereby the compressed fluid is transformed to a gaseous state (fig 5); the restrictive passage includes a discharge device that produces a shaped beam of particles of the desired substance at a point beyond an outlet of the discharge device, where the fluid is in a gaseous state at a location before or beyond the outlet of the discharge device (114); and the cone angle appears to be within that as recited by applicant. The Examiner further states Lee et al discloses that the desired substance is less soluble in the compressed fluid relative to its solubility in the solvent (col 5, lines 59-67, col 6, lines 1-9); Lee et al also discloses mixing (F); and that it would have been obvious to one with ordinary skill in the art to include such to Smith because Lee et al teaches phase limitations as shown by example for the particular embodiment of Figure 3 to Lee et al.; and that it would have been obvious to one with ordinary skill in the art to include agitation and the claimed method (in claim 14) of doing such because Lee teaches such for uniformity of viscosity (col 8, lines 9-10). This rejection is respectfully traversed.

Contrary to the Examiner's assertions, Smith doe not disclose a process wherein a particle formation vessel is charged with a compressed fluid and into which is introduced a first feed stream comprising at least a solvent and a desired substance dissolved therein through a first feed stream introduction port and a second feed stream comprising the compressed fluid through a second feed stream introduction port, where the feed stream is dispersed in the compressed fluid, allowing extraction of the solvent into the compressed fluid and precipitation of particles of the desired substance. Rather, Smith describes a RESS (rapid expansion of supercritical solutions) type process (as discussed at page 1, lines 15-24 of the present specification), wherein particles are formed upon expansion of a supercritical fluid solution. Note in Fig 4 of Smith that particles are not formed in a particle formation vessel charged with compressed fluid, but rather upon expansion of a compressed fluid solution from transfer line 216 into a vacuum chamber 218. The particles are formed and deposited in vacuum chamber 218, not formed in a particle formation vessel charged with a compressed fluid and subsequently exhausted from the particle formation vessel under essentially steady-state conditions. Col 8, lines 46-67 cited by the Examiner further clarifies that particle formation occurs upon expansion, rather than in the compressed fluid transfer line. The Examiner's further reliance upon Lee et al is also misplaced, as Lee is directed towards the use of supercritical

fluids as diluents in liquid spray application of coatings, not the formation of particles in a particle formation vessel charged with compressed fluid upon introduction of feed stream comprising a solvent and a desired substance dissolved therein allowing extraction of the solvent into the compressed fluid and precipitation of particles of the desired substance. Col 5, lines 59-67 and col 6, lines of 1-9 Lee et al cited by the Examiner would actually appear to clearly teach away from the present invention, as Lee et al explicitly teaches practicing at points E to E' in Fig. 1, so as to avoid formation of two phases. As neither of such references are directed towards precipitation of particles in a particle formation vessel charged with compressed fluid upon introduction of feed stream comprising a solvent and a desired substance dissolved therein, the proposed combination clearly can not teach or suggest the claimed invention and a prima facie case of obviousness has not been established. Reconsideration of this rejection is accordingly respectfully requested.

Claims 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith in view of Lee et al as applied to claims above, and further in view of Fu et al. The Examiner states Smith and Lee et al do not disclose a dye used in a ink jet printing process; Fu et al discloses a dye in a ink jet printing process (para 0031); and that it would have been obvious to one with ordinary skill in the art to include a dye used in a ink jet printing process because Fu et al teaches supercritical fluid used as a solvent (para 0031). This rejection is respectfully traversed. As discussed above, neither of Smith or Lee et al is directed towards precipitation of particles in a particle formation vessel charged with compressed fluid upon introduction of feed stream comprising a solvent and a desired substance dissolved therein. The additional reference to Fu et al. does not overcome such basic deficiency, as Fu et al merely states that supercritical carbon dioxide may be sued as a solvent for polymerization. The proposed combination accordingly clearly can not teach or suggest the claimed invention, and a prima facie case of obviousness has not been established. Reconsideration of this rejection is accordingly respectfully requested.

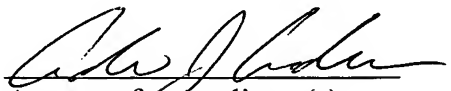
Double Patenting

Claims 1-16 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 38-48, 73-74 of U.S. Patent No. 6,471,327 in view of Lee et al. The Examiner states that the claims of the present invention appear to include further recitation "inherently present" in any supercritical fluid-type coating process such as disclosed by Lee et al. Regarding the recitation "the desired substance is less soluble in the compressed fluid relative to its solubility in the solvent and the solvent is soluble in the compressed fluid", the Examiner states this recitation would be obvious to one with ordinary skill in the art for the reasons as given above. This rejection is respectfully traversed.

Claim 1 of the present invention specifically requires introducing into a particle formation vessel a first feed stream comprising a solvent and a desired substance dissolved therein through a first feed stream introduction port and a second feed stream comprising a compressed fluid through a second feed stream introduction port, wherein the desired substance is less soluble in the compressed fluid relative to its solubility in the solvent and the solvent is soluble in the compressed fluid, and wherein the first feed stream is dispersed in the compressed fluid, allowing extraction of the solvent into the compressed fluid and precipitation of particles of the desired substance. Such requirement is not set forth in the claims of U.S. Patent No. 6,471,327, and such patent rather teaches the formation of thermodynamically stable/metastable mixtures (as opposed to precipitation) of a pressurized fluid and functional material. Further, rather than be "inherently present" in any supercritical fluid-type coating process such as disclosed by Lee et al., Lee et al. actually only teaches the use of a supercritical fluid as a diluent for a viscous liquid polymeric composition, and in fact would appear to teach against particle formation as explained above, as Lee et al explicitly teaches practicing at points E to E' in Fig. 1, so as to avoid formation of two phases. Accordingly, a prima facie case of obviousness-type double patenting has not been established, and reconsideration of this rejection is respectfully requested.

In view of the foregoing amendments and remarks, reconsideration of this patent application is respectfully requested. A prompt and favorable action by the Examiner is earnestly solicited. Should the Examiner believe any remaining issues may be resolved via a telephone interview, the Examiner is encouraged to contact Applicants' representative at the number below to discuss such issues.

Respectfully submitted,



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If the Examiner is unable to reach the Applicant(s) Attorney at the telephone number provided, the Examiner is requested to communicate with Eastman Kodak Company Patent Operations at (585) 477-4656.